



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

January 6, 2006

Certified Mail No. 7005 1160 0000 1550 0689

Jack Ambrosiani, President
Cygnus, Inc.
12 Emerald Industrial Park Road
Ponderay, ID 83852

RE: Facility ID No. 017-00051, Cygnus, Inc., Ponderay
Final Permit Letter

Dear Mr. Ambrosiani:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) Number P-040126 for Cygnus, Inc., in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on November 24, 2004. This permit is effective immediately. This permit does not release Cygnus from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Coeur d'Alene Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator
Air Quality Division

MB/AC/sd

Permit No. P-040126

Enclosures



**Air Quality
PERMIT TO CONSTRUCT**
**State of Idaho
Department of Environmental Quality**

PERMIT No.: P-040126

FACILITY ID No.: 017-00051

AQCR: 63

CLASS: SM

SIC: 3471

ZONE: 11

UTM COORDINATE (km): 534.5, 5349.6

1. **PERMITTEE**
Cygnus, Inc.

2. **PROJECT**
Initial Permit to Construct - Two Bench-style Paint Booths

3. **MAILING ADDRESS**
P.O. Box 466

CITY
Ponderay

STATE
ID

ZIP
83852

4. **FACILITY CONTACT**
David H. Duncan

TITLE
Haz-Mat Coordinator

TELEPHONE
208-263-4761

5. **RESPONSIBLE OFFICIAL**
Jack P. Ambrosiani

TITLE
President

TELEPHONE
208-263-4761

6. **EXACT PLANT LOCATION**
122 Emerald Industrial Park Road, Ponderay, Idaho

COUNTY
Bonner

7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**
Fabrication of Sheet Metal Parts for the Aerospace Industry

8. **GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.


TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: January 6, 2006

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE.....	3
1. PERMIT TO CONSTRUCT SCOPE.....	4
2. PAINT BOOTHS, PB-1 AND PB-2.....	5
3. FUEL-BURNING EQUIPMENT.....	7
4. PERMIT TO CONSTRUCT GENERAL PROVISIONS.....	9

Acronyms, Units, and Chemical Nomenclature

AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
CAA	Clean Air Act
CFR	Code of Federal Regulations
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
PTE	potential to emit
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO ₂	sulfur dioxide
Therm	a quantity of heat equivalent 0.1 MMBtu
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

1. PERMIT TO CONSTRUCT SCOPE***Purpose***

- 1.1 This permitting action is for the construction of two bench-style paint booths for the application of various aerospace paints, and the installation of natural gas-fired equipment for process and building heat.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this PTC.

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
2	Paint Booths PB-1	Filter Stack
2	Paint Booths PB-2	Filter Stack
3	Ruud Silhouette II	None
3	Ruud Silhouette II	None
3	Lennox LF 3E	None
3	Ruud Silhouette II	None
3	Carrier 58 RAV	None
3	Carrier 58 RAV	None
3	Power Flame CX-30	None
3	Make-up Air Unit	None

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

2. PAINT BOOTHS, PB-1 AND PB-2**2.1 Process Description**

The facility operates two bench-style paint booths, PB-1 and PB-2, for the application of various aerospace paints.

2.2 Emissions Control Description

Particulate matter emissions from painting operations are controlled by a filter stack consisting of three filters arranged back-to-back. Each paint booth is equipped with its own filter stack. Each filter stack has a capture efficiency of 99.99% for PM₁₀ sized particulate.

Table 2.1 PB-1 AND PB-2 DESCRIPTION

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
Paint booth PB-1	Filter stack	PB-1 stack
Paint booth PB-2	Filter stack	PB-2 stack

Emissions Limits**2.3 Opacity Limit**

Emissions from each paint booth stack (PB-1 stack, PB-2 stack), or any other stack, vent, or functionally equivalent opening associated with the paint booths, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements**2.4 Filter Stack Operations**

The permittee shall install, maintain and operate, according to manufacturers and O&M manual recommendations and specifications, a filter stack, as described in the permit application for paint booths PB-1 and PB-2.

2.5 Filter Stack Pressure Drop Monitoring Device

The permittee shall install, calibrate, maintain and operate, according to manufacturer's recommendations and specifications, a pressure drop monitoring device to measure the pressure drop across the filter stacks connected to paint booth PB-1 and paint booth PB-2.

2.6 Filter Stack Pressure Differential

The permittee shall maintain the pressure drop across each respective filter stack within manufacturer's and O&M manual specifications whenever paint booth PB-1 or paint booth PB-2 is operating.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

2.7 Operations and Maintenance Manual Requirements

Within 180 days after issuance of this permit, the permittee shall have developed an O&M manual for each filter stack which describes the procedures that will be followed to comply with General Provision 2 and the air pollution control device requirements contained in this permit. The manual shall remain onsite at all times and made available to DEQ representatives upon request.

2.8 HAPs Content Limit

Total HAPs content of paints used shall not exceed 12.48 tons per year

2.9 Material Purchase Records

For paint booths PB-1 and PB-2, the permittee shall maintain the purchase records of all paints. The purchase records shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

2.10 Material Safety Data Sheets

For paint booths PB-1 and PB-2, the permittee shall maintain the MSDS' for the paints that contain HAPs purchased pursuant to Permit Condition 2.9. The MSDS' shall remain on site at all times and shall be made available to DEQ representatives upon request.

Monitoring and Recordkeeping Requirements**2.11 Pressure Drop**

When operating, the permittee shall monitor and record once per day, the pressure differential across each filter stack.

2.12 Paint and Coatings Usage Records

For paint booths PB-1 and PB-2, the permittee shall monitor and record monthly, the usage of each paint that contains HAPs. The usage records shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

2.13 HAP Monitoring Requirements

The permittee shall monitor and record the monthly and annual HAP usage from paint booths PB-1 and PB 2 using the purchase records required by Permit Condition 2.9, the MSDS' required by Permit Condition 2.10, and the material usage records required by Permit Condition 2.12 to demonstrate compliance with Permit Condition 2.8. Annual HAP emissions shall be determined by summing monthly HAP emissions over the previous consecutive 12-month period. Records of this information shall be maintained on site for the most recent two year period and shall be made available to DEQ representatives upon request.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

3. FUEL-BURNING EQUIPMENT**3.1 Process Description**

The facility also operates the natural gas-fired equipment to generate process heat and space heating.

3.2 Emissions Control Description

The natural gas-fired equipment is uncontrolled.

Table 3.1 COMBUSTION EQUIPMENT CONTROL DESCRIPTION

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
Ruud Silhouette II	None	Ruud Silhouette II Stack
Ruud Silhouette II	None	Ruud Silhouette II Stack
Lennox LF 3E	None	Lennox LF 3E Stack
Ruud Silhouette II	None	Ruud Silhouette II Stack
Carrier 58 RAV	None	Carrier 58 RAV Stack
Carrier 58 RAV	None	Carrier 58 RAV Stack
Power Flame CX-30	None	Power Flame CX-30 Stack
Make-up Air Unit	None	Make-up Air Unit Stack

Emissions Limits**3.3 Opacity Limit**

Emissions from combustion equipment listed in Table 3.1, or any other stack, vent, or functionally equivalent opening associated with this facility, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

3.4 Grain-loading Requirement for Fuel-burning Equipment

Particulate matter emissions from combustion source listed in Table 3.1 shall not exceed a concentration of 0.015 grains per dry standard cubic feet (gr/dscf) corrected to 3% oxygen.

Operating Requirements**3.5 Heat Input Capacity**

Total maximum heat input capacity of the combustion equipment listed in Table 3.1 shall not exceed 195,804 therms per year.

3.6 Fuel Type

The combustion sources listed in Table 3.1 shall burn natural gas only.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

Monitoring and Recordkeeping Requirements**3.7 Heat Input Capacity**

The permittee shall monitor and record monthly the total therms used by all combustion sources listed in Table 3.1. Total annual heat input capacity of the combustion sources listed in Table 3.1 shall be determined by summing total amount of therms used each month over the previous consecutive 12-month period. Records of this information shall be maintained on site for the most recent two year period and shall be made available to DEQ representatives upon request.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within 5 working days after occurrence:
 - Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040126

Permittee:	Cygnus, Inc.	Facility ID No. 017-00051	Date Issued:	January 6, 2006
Location:	Ponderay, Idaho			

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.